# An Empirical Study on Demographic Correlates of Emotional Intelligence of Engineering Students

\* V. Rama Devi \*\* P. Lakshmi Narayanamma

#### **Abstract**

The study aimed to explore the relationship between demographic factors and emotional intelligence of engineering students. The survey was conducted among 177 engineering students with the help of a structured questionnaire. The data collection instrument was tested for reliability, and Cronbach's alpha was found to be 0.752, thereby ensuring the reliability of the instrument. The data was analyzed using various statistical tools like *t* - test, mean, standard deviation, ANOVA, and chisquare test. The findings revealed that gender significantly influenced emotional intelligence, but schooling and background of the students did not exert a significant impact. The results also showed that emotional intelligence is independent of age, father's education and occupation, mother's education, family size, and income, but not mother's occupation.

Keywords: emotional intelligence, demographic factors, feelings, emotional functions

JEL Classification: I2, J1, L84

Paper Submission Date: April 2, 2014; Paper sent back for Revision: July 22, 2014; Paper Acceptance Date:

November 5, 2014

he human mind deals with both cognitive and feeling functions. The cognitive constituent of the mind deals with mental actions pertaining to analyzing, comparing, inferring, questioning, contrasting, evaluating, etc. The feeling (or emotional) function is that element of the mind which observes and notifies about how one is behaving in a situation. Both cognitive and feeling functions influence each other in a reciprocal manner. Emotional intelligence (EI) can reasonably be envisaged as a measure of the degree to which a person successfully (or unsuccessfully) determines emotional or feeling responses to the situations by applying appropriate reasoning and sound judgment.

The extent to which a person is aware of the four domains of emotional intelligence - awareness of emotions, enabling reflection, thoughtful appreciation of emotions and controlling and managing emotions, will determine ability of the person to process abstract thought and expertly navigate in the environment. Emotional intelligence plays a key role in personal, academic, and professional excellence. In the recent times there is increasing focus on the significance of Emotional intelligence. Variations in family organization, the diminishing role of parents in education and technological advancements are seen as causative factors triggering the requisite to increase Emotional Quotient (EQ) of the students at different levels of education.

Many research studies are conducted with regard to the impact of certain demographic variables such as age, gender, family background, etc., on emotional intelligence. Though similar conclusions were not reported, the impact of demographic variables on emotional intelligence of individuals was emphasized. In this context, the present study is undertaken to explore the relationship between demographic variables and emotional intelligence of engineering students.

<sup>\*</sup> Associate Professor & Head, Department of Management, Sikkim University, Samdur, Tadong, Gangtok, Sikkim - 737 102. E mail: vangapanduramadevi1970@gmail.com

<sup>\*\*</sup> Assistant Professor, School of Management Studies, Vignan University, Vadlamudi, Guntur (dt.), Andhra Pradesh. E-mail: lakshmipathi.mba@gmail.com

### The Concept of Emotional Intelligence

Goleman (1995) defined emotional intelligence as the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships." According to Bechara, Tranel, and Damasio (2000), emotional intelligence is a set of emotional abilities that comprise a form of intelligence that is dissimilar from cognitive intelligence or IQ. Emotional intelligence is being able to monitor our own and others' feelings and emotions, to discriminate among them, and to use this to guide our thinking and actions (Salovey & Mayer, 1990).

#### **Literature Review**

The research studies pertaining to the relationship between demographic variables and emotional intelligence of individuals are reviewed and presented in accordance with different variables such as age, gender, father's occupation, family income, and so forth.

⇒ **Age:** Kafetsios (2004) based on a study among 239 adults aged between 19-66 years, reported that aged respondents scored higher on three out of four dimensions of EI, that is, facilitation, understanding and management and substantiated the view that as age progresses emotional intelligence increases. Similarly Srivastava and Bharamanaikar (2004) based on their study found that among the sample respondents of 291 Indian army officers, EI had increased with age. The research study conducted by Salovey and Mayer (1990) revealed that EI increased with increasing age and experience. Goleman (1995) found that the precursors of EI emerge among very young children. Mayer, Caruso, and Salovey (2000) conducted a series of studies and reported that aged and experienced people have more emotional intelligence which substantiates it as ability more than a personality trait. Wong, Wong, and Law (2005) working with different respondents concluded that, there is positive correlation between age and emotional intelligence in different job situations.

Van Rooy, Alanso, and Visweshvaran (2005) conducted a study by administering a common measure of emotional intelligence to 275 participants in order to investigate the relationship between age and emotional intelligence. Results revealed that with increase in age, emotional intelligence score tended to rise. Another study carried out by Gowdhaman and Murugan (2009) among 300 B.Ed. teacher trainees reported a significant impact of age on emotional intelligence. Chapman and Hayslip Jr. (2006) using a cross sectional analysis measured emotional intelligence in young and middle aged respondents. Delineation of the construct of emotional intelligence was explored in young and middle-aged adults. In comparison with young adults, middle aged adults made more use of optimism which is a constituent of emotional intelligence to regulate the moods. Contradictory to the previously mentioned findings that established the relationship between emotional intelligence and age, Tyagi (2004) based on a study among secondary school teachers reported that the level of emotional intelligence does not depend on age. Similarly Jacques (2009) conducted a study among a sample of 221 college students and found that age did not predict emotional intelligence.

⇔ **Gender**: David, Alonso, and Viswesvaran (2005) and Harrod and Scheer (2005) found that there is a significant difference in gender where females score high level of EI compared to men. Thingujam and Ram (2000) reported that women significantly scored higher in emotional intelligence in comparison with men. Similarly, Mohanty and Uma Devi (2010) based on their study on gender differences expressed that girls are more confident, positive, conscious and are well aware of their feelings when compared to boys. Similarly, Ciarrochi, Chan, and Bajgar (2001) reported that EI is higher for females than males. Das (2011) conducted a study to examine the influence of gender on emotional intelligence and personality among professional (168) and non-professional students (78). Results indicated that female non-professional students are better emotionally intelligent than male non-professional students.

Nasar and Nasar (2008) observed emotional intelligence levels of 100 male and 100 female undergraduate students aged between 17-20 years. The findings projected the incidence of higher emotional intelligence in the

adolescent girl students when compared to the boys. Similar observations are made by Brackett, Mayer, and Warner (2004) in their study among 330 college students that emotional intelligence score of women was significantly higher than men. Lower level of emotional intelligence in males implies the lack of ability to understand and manage emotions. In addition to this, it was related with negative effects including illegal use of drug and alcohol, unusual behaviour and strained relations with friends.

The findings of the study conducted by Kafetsios (2004) using Mayer, et al. (2000) emotional intelligence test (MSCEIT V2.0) among a sample of 239 adults in the age group of 19 to 66 years revealed gender differences in emotional intelligence. The females scored higher when compared to males on emotion perception and experimental area. Similarly another study carried out by Pandey and Tripathi (2004) among 100 sample respondents comprising 50 males and 50 females reported that the score of EI was significantly higher for females than males reflecting that they are more adept in managing their own emotions as well as of others.

Van Rooy, et al. (2005) administered a common measure of emotional intelligence on a sample 275 participants consisting of 216 females. The study revealed gender differences in emotional intelligence and the EI score for females was slightly higher than males. Tatawadi (2009) explored the emotional maturity variations among male and female management students. It was observed that the females are emotionally stronger and sensitive when compared to the males. The girls' score was higher for dimensions of empathy, social responsibilities and interpersonal relationships than boys. Girls are more receptive towards their relationships with parents, friends and siblings which in turn help them to have higher emotional intelligence when compared to boys.

Many studies revealed that girls have higher level of emotional intelligence when compared to boys. But some studies revealed contradictory results. Mishra and Ranjan (2008) investigated whether gender plays an important role in affecting emotional intelligence. They conducted a study among 80 adolescents comprising 40 boys and 40 girls. The results portrayed that there is significant difference in emotional intelligence levels between adolescent boys and girls and further it was found that boys scored higher on emotional intelligence than the girls. This implies that the adolescent boys are relatively better than the adolescent girls on intra-individual, interindividual, adaptability and stress management skills and the adolescent boys' level of happiness and optimism is of higher order.

Hunt and Evans (2004) conducted an empirical study among a sample of 414 students out of which 181 are male students and 233 are female students with traumatic experiences to determine their emotional intelligence level. The results of the study revealed that males have higher EI than females. Uma Devi and Rayal (2004) in order to explore gender differences in EI, conducted a study which revealed that 76% of girls scored EI above average, while 81% of boys scored EI above average. This shows that boys have slightly higher emotional intelligence in comparison with their counterparts. In the case of few studies, Katyal and Awasthi (2005) and Tyagi (2004), results were different as they reported that gender does not significantly influence emotional intelligence. In another study conducted by Charbonneau and Nicol (2002 among 134 adolescents involved in a six week training camp run by the military, it was observed that girls' score of EI was somewhat but not significantly higher than the boys.

Mathur, Malhotra, and Dube (2005) explored the impact of gender on selected variables of emotional intelligence, which include attribution, taking responsibility and scholastic achievement by carrying out a study among 83 high school students in the age group of 13 - 15 years. The study projected no significant gender influence on the dimensions of emotional intelligence. Depape, Larson, Voelker, and Page (2006) examined whether gender predicts emotional intelligence, in a varied sample of 126 undergraduate respondents and found that gender does not predict emotional intelligence which was divergent to their expectation. Jan, Hyder, and Ruhi (2013) based on a study found that majority of girls studying in professional colleges have high self—awareness, self development, self esteem and self motivation; while empathy, value orientation, commitment and altruistic behaviour and their emotional stability are observed at medium level.

⇒ Other Variables - Family Income, Parent's Education, Occupation : Rauf, Tarmidi, Omar, Yaaziz, and Zubir,

(2013) based on an empirical study found that family income, year of degree and prior education level show significant influence on the level of EI among accounting students. Namdar, Sahebihagh, Ebrahimi, and Rahmani (2008) based on a study expressed that there was no significant relation between emotional intelligence score and gender, educational qualification, and students' interest in nursing. Gowdhaman and Murugan (2009) conducted an empirical study among 300 B.Ed. teacher trainees in order to investigate the relationship between income and the level of emotional intelligence and the results indicated that the there is no significant relationship between income and emotional intelligence.

Mohanty and Uma Devi (2010) conducted a study and observed that good educational background and occupation of parents positively and significantly affected the interpersonal relationship (EI) of the adolescents. Sumantha (2009) found that rural/ urban background do not significantly affect emotional intelligence. The results of the research conducted by Yelkikalan, Hacioglu, Kiray, Ezilmez, Soylemezoglu, Cetin, Sonmez, and Özturk (2012)revealed that there is no significant difference in the relationship between the faculty of students and their emotional intelligence, apart from the sociability. Kant and Lenka (2013) conducted an empirical investigation and found that gender and type of institution do not have significant effect on emotional intelligence. But socio economic status shows a significant impact on emotional intelligence.

### **Objectives of the Study**

- (1) To investigate whether engineering students differ in their levels of emotional intelligence.
- (2) To determine if there is significant difference in emotional intelligence levels of engineering students based on gender, schooling, and background.
- (3) To determine whether emotional intelligence levels of students significantly differ based on their branch of engineering.
- (4) To explore the relationship between emotional intelligence of students and variables like age, father's education, mother's education, father's occupation, mother's occupation, family size and monthly income of the family.
- (5) To study the gender and age interaction effect on emotional intelligence.

## **Hypotheses**

- (1) Engineering students do not differ in their levels of emotional intelligence.
- (2) Gender, schooling and background of the students do not make significant influence on their emotional intelligence.
- (3) Emotional intelligence does not significantly differ across different branches of engineering.
- (4) Emotional intelligence of the students is independent of age, father's education & occupation, mother's education & occupation, family size and monthly income of the family.
- (5) Gender, age and gender-age interaction will not significantly influence emotional intelligence.

### **Research Methodology**

Engineering students of a deemed university in Andhra Pradesh constitute the population for the study. The sample size is 177 which is drawn using simple random sampling method. As the study is empirical in nature it is based on survey research. Primary data is collected with the help of a questionnaire designed for the purpose of the study. Questionnaire consists of two sections - the first section provides demographic details of the

Table 1. Positive and Negative Statements of the Emotional Intelligence Scale

Statements	S. No. in the tool
Negative	13,18.
Positive	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33.

Table 2. Reliability of the Emotional Intelligence Scale

Cronbach's Alpha	Number of Items				
0.752	33				

respondents and the second section presents items relating to emotional intelligence. Emotional intelligence scale developed and standardized by Schutte, Malouff, Hall, Haggerty, Cooper, Golden, and Dornheim (1998) was used in this study. It is based on a 5- point scale which includes *strongly agree* (*SA*), *agree* (*A*), *neutral* (*N*), *disagree* (*DA*), and *strongly disagree* (*SD*). The scale comprises 33 items in which 31 are positive and 2 are negative statements (Table 1). In case of negative items the scoring is reversed.

#### ⇒ Statistical Tools Used for Testing Hypotheses

- ⇒ **Hypothesis 1:** Based on mean scores, whether engineering students differ in their levels of emotional intelligence is tested. Using mean scores students are classified into low level of emotional intelligence group, moderate level of emotional intelligence group and high level of emotional intelligence group.
- ⇒ **Hypothesis 2:** In order to determine whether the mean scores of emotional intelligence of two groups Male and female, Govt. school and private school, Rural and urban background, differ, 't' test is used.
- ⇒ **Hypothesis 3:** In order to test whether the emotional intelligence levels differ across different branches of engineering, ANOVA is used.
- ⇒ **Hypothesis 4 :** Chi-square test, a non-parametric test is used to test the relationship between demographic variables like age, father's education, mother's education, father's occupation, mother's occupation, family size & monthly income of the family and emotional intelligence of students.
- ⇒ **Hypothesis 5 :** In order to test whether gender, age and gender-age interaction will influence emotional intelligence, Regression analysis is used.
- ⇒ **Reliability of the Instrument:** It is observed from Table 2 that Emotional intelligence instrument has 33 items. Cronbach's alpha for the instrument is 0.752 which ensures the reliability of the instrument.

Table 3 portrays that 65% of the respondents are boys and 35% are girl students. The average age of the respondents is 19.75. 80.2% of the respondents had their schooling from private schools. Majority of the respondents' mother is not working and the family size is 4. The study was conducted during October - December 2013.

### **Analysis and Results**

⇒ Hypothesis 1: Engineering students do not differ in their levels of emotional intelligence.

The following procedure is adopted in order to test the hypothesis. Mean and standard deviation of emotional intelligence scores of the students have been computed. The calculated values of mean and standard deviation are 126.8 and 10.318 respectively. On the basis of the calculated mean (M) and standard deviation (SD), the total sample was further classified into high (above M+1 SD), moderate (between M-1 SD and M+1 SD), and low (below M-1 SD) emotional intelligence levels.

**Table 3. Demographic Details of the Respondents** 

S. No.	Variable	Sub-category	Sample size	%
1	Gender	Male	115	65
		Female	62	35
2	Age	18 years	20	11.3
		19 years	51	28.8
		20 years	67	37.9
		21 years	32	18.1
		22 years	6	3.4
		23 years	1	6
3	Type of schooling	Private	142	80.2
		Government	35	19.8
4	Father's educational background	Illiterate	14	7.9
		X Std.	43	24.3
		Intermediate	35	19.8
		Graduation	62	35
		Post graduation	18	10.2
		Diploma	3	1.7
		Ph.D	2	1.1
5	Father's occupation	Business	67	37.9
		Farmer	47	26.6
		Private job	29	16.4
		Government job	34	19.1
6	Mother's education	Illiterate	37	20.9
		I – X std.	69	39
		Intermediate	25	14.1
		Graduation	38	21.5
		Post graduation	8	4.5
7	Mother's occupation	Working	18	10.2
		House wife	159	89.8
8	Family size	< 4	23	13
		4	109	61.6
		5	29	16.4
		>5	16	9
9	Monthly income of the family	< 20,000	25	14.1
	, (in ₹)	20,000 - 30,000	54	30.5
	, <i>,</i>	30,000 – 40,000	51	28.8
		40,000 – 50,000	29	16.4
		50,000 – 60,000	5	2.8
		> 60,000	13	7.4
10	Background	Rural	95	53.7
-	<u>0</u> 3	Urban	82	46.3
	Total		177	100

**Table 4. Emotional Intelligence Levels of Students** 

Level of Emotional Intelligence	Frequency	%	Valid %	Cumulative %
Low (less than 116.482)	35	19.8	19.8	19.8
Moderate (116.482 -137.118)	114	64.4	64.4	84.2
High (above 137.118)	28	15.8	15.8	100.0
Total	177	100.0	100.0	

Table 5. Mean and Standard Deviation of Emotional Intelligence Scores Based on Gender

	Gender	Ν	Mean	Std. Deviation	Std. Error Mean
Emotional intelligence	Male	115	125.50	10.275	0.958
	Female	62	129.21	10.039	1.275

Table 6. t - test

Levene's Test for Equality of Variances						
		F	Sig.	т	df	Sig. (2- tailed)
ΕI	Equal variances assumed	0.05	0.784	-2.307	175	0.55
	Equal variances not assumed			-2.323	127	0.022

High emotional intelligence score: Mean + SD = 137.118Moderate emotional intelligence score: 116.482 – 137.118 Low emotional intelligence score: Mean – SD = 116.482

Table 4 reveals emotional intelligence levels of the respondents. 19.8 % of the respondents have low emotional intelligence score, 15.8% of the respondents have high emotional intelligence score and majority (64.4%) of the respondents have moderate emotional intelligence score. This shows that engineering students differ in their levels of emotional intelligence and hence hypothesis 1 is rejected.

⇒ **Hypothesis 2(a):** Gender of the college students does not make significant influence on their emotional intelligence. To test this hypothesis, the following procedure is adopted. Means and standard deviation of emotional intelligence scores for the two sub groups -male and female have been computed (Table 5) and t - test is used in order to test the hypothesis.

If the p - value is less than or equal to  $\alpha$  level, then the bottom row of the output (the row labeled "Equal variances not assumed") is used. If the p - value is greater than  $\alpha$  level, then the top row of the output (the row labeled "Equal variances assumed") is used. It is observed from Table 6 that, the p - value (.784) is larger than  $\alpha$ (.05), so it will be assumed that the variances are equal and the top row of the output is used. The decision rule is given by: If  $p = \alpha$ ,  $H_0$  is rejected. The p-value is .002 which is less than  $\alpha$ , that is, .05, hence  $H_0$  is rejected. Hence it can be inferred that gender of the college students makes significant influence in their emotional intelligence. From Table 6 it is observed that t - test revealed a statistically reliable difference between the mean score of emotional intelligence of male and female students. It is also observed that female students have more emotional intelligence when compared to their male counterparts and it is statistically significant. Therefore, hypothesis 2(a) that gender of the college students does not make significant influence on their emotional intelligence is rejected.

The finding is in conformity with findings of Davide, et al. (2005), Harrod and Scheer (2005), Mohanty and Uma Devi (2010), Ciarrochi et al., (2001), Nasar and Nasar (2008), Brackett et al. (2004), Pandey and Tripathi (2004), Van Rooy et al. (2005), and Tatawadi (2009) that there is a significant difference in gender where females score high level of EI compared to men.

Table 7. Mean and Standard Deviation of Emotional Intelligence Scores Based on Schooling

	Schooling	N	Mean	Std. Deviation	Std. Error Mean
EI	Govt. schooling	35	129.03	9.323	1.576
	Private schooling	142	126.25	10.507	0.882

Table 8. t - test

	Levene's	Test for Equal				
		F	Sig.	t	df	Sig. (2- tailed)
ΕI	Equal variances assumed	1.468	0.227	1.429	175	0.155
	Equal variances not assumed			1.537	57	0.130

Table 9. Mean and Standard Deviation of Emotional Intelligence Scores Based On Background

	Background	N	Mean	Std. Deviation	Std. Error Mean
EI	Rural	95	126.88	9.643	0.989
	Urban	82	126.71	11.107	1.227

Table 10. t - test

	Levene's	Test for Equali				
		F	Sig.	t	df	Sig. (2-tailed)
EI	Equal variances assumed	0.681	0.411	0.113	175	0.910
	Equal variances not assumed			0.112	162	0.911

⇒ **Hypothesis 2(b):** Schooling of the engineering students does not make significant influence in their emotional intelligence.

The Table 7 reveals that the mean score of emotional intelligence of students with Govt. schooling background is 129.03 whereas it is 126.25 for students with private schooling background. EI score is slightly higher for students with Govt. schooling background.

Table 8 reveals that  $p(.155) > \alpha(.05)$  and hence  $H_0$  is accepted. The t-test failed to reveal a statistically reliable difference and the null hypothesis 2(b) is retained. In other words schooling of the college students does not make any significant influence in their emotional intelligence.

⇒ **Hypothesis 2(c):** Rural/ urban background of the college students does not make significant influence in their emotional intelligence.

It is observed from Table 9 that the mean scores of emotional intelligence of students with rural and urban background is almost similar. Table 10 depicts that p value (.910) is greater than  $\alpha$  value (.05) and hence the null hypothesis 2(c) is retained. In other words rural/urban background of the college students does not make any significant influence in their emotional intelligence. The present finding is in agreement with the findings of Sumanta Kumar (2009) that rural/urban background does not affect emotional intelligence.

⇒ **Hypothesis 3:** Emotional intelligence does not significantly differ across different branches of engineering. Table 11 shows that the mean score of emotional intelligence of EEE branch of students is relatively higher, followed by CSE students and ECE students. Table 12 shows that F value is insignificant and hence failed to reject hypothesis 3. It implies that emotional intelligence does not significantly differ across different branches of engineering.

**Table 11. Descriptive Statistics** 

Branch	Mean	N	Std. Deviation
CSE	126.54	74	10.729
ECE	124.83	30	10.799
EEE	127.88	73	9.680
Total	126.80	177	10.318

Table 12. ANOVA

			Sum of Squares	df	Mean Square	F	Sig.
Branch	Between groups	Combined	205.644	2	102.822	0.965	0.383
	Within Groups		18530	174	106.497		
	Total		18736.079	176			

Table 13. Chi-square values

S. No.	Variable	Chi-square value	Significant/ Insignificant
1	Age	11.858	Insignificant
2	Father's educational background	15.579	Insignificant
3	Father's occupation	8.658	Insignificant
4	Mother's educational background	5.193	Insignificant
5	Mother's occupation	5.248	Significant at 0.10 level
6	Family size	0.414	Insignificant
7	Income	10.592	Insignificant

⇒ **Hypothesis 4:** Emotional intelligence of the students is independent of age, father's occupation, mother's occupation, family size and monthly income of the family.

Table 13 depicts that chi-square values are insignificant for all the variables barring mother's occupation which is significant at 0.10 level. It indicates that emotional intelligence of the students is independent of age, father's education & occupation, mother's education, family size and income. Hence, hypothesis 4 that emotional intelligence of the students is independent of age, father's occupation, family size and monthly income of the family is accepted.

The findings are in agreement with the findings of Tyagi (2004) and Jacques (2009) that emotional intelligence is independent of age. The results are also compatible with previous findings of Gowdhaman and Murugan (2009) research study which indicated that the socio economic status or monthly income does not cause any significant effect on the emotional intelligence. The results of the present research differed with the findings of Mohanty and Uma Devi (2010) that good education of parents positively and significantly affect the interpersonal relationship (EI) of the adolescents.

#### ⇒ Hypothesis 5

- (1) Gender will not influence emotional intelligence.
- (2) Age will not influence emotional intelligence.
- (3) Gender and age interaction will not influence emotional intelligence.

The Table 14 reveals that F- value is significant for Gender at 0.10% level and hence the hypothesis 5(i) that gender will not influence emotional intelligence is rejected. For age and gender - age interaction, F value is

Table 14. Tests Between - Subjects Effects Dependent Variable: Emotional Intelligence

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1222.724(a)	9	135.858	1.295	0.243
Intercept	675664.923	1	675664.923	6442.857	0.000
Gender	326.706	1	326.706	3.115	0.079
Age	585.640	5	117.128	1.117	0.353
Gender -Age	81.978	3	27.326	0.261	0.854
Error	17513.355	167	104.870		
Total	2864686.000	177			
Corrected Total	18736.079	176			

insignificant and therefore hypothesis 5(iii) that age and gender-age interaction will not influence emotional intelligence is accepted. This reflects that gender significantly influences emotional intelligence but age and gender- age interaction does not exercise significant influence on emotional intelligence of the students.

#### Conclusion

Emotional intelligence is considered to be important to lead a happy and successful life. The present study investigated the relationship between demographic factors and emotional intelligence of engineering students of a deemed university. The findings of the study revealed that female students have more emotional intelligence when compared to male students and gender has significant relationship with emotional intelligence. Schooling and background of the students did not show any significant influence on emotional intelligence. It is also observed that emotional intelligence of the students is independent of age, father's education & occupation, mother's education, family size income except mother's occupation.

The results indicated that engineering students differ in their levels of emotional intelligence but it does not significantly differ across different branches of engineering.

## **Managerial Implications**

Emotional intelligence plays a key role in personal, academic, and professional excellence. It is essential to know the factors that influence emotional intelligence of the students. The impact of demographic correlates on emotional intelligence of students is an important input to the teachers, family members, educational institutions, work organizations and society at large while dealing with them. Based on the relationship between demographic variables and emotional intelligence of the students, appropriate measures can be taken in order to improve EQ of the students.

## **Limitations of the Study and Scope for Further Research**

The limitations of the study are as follows: the reliability of the results depends upon the opinions expressed by the respondents; the scope of the study is restricted to only one deemed university in Andhra Pradesh.

The study was conducted among engineering students. It may be extended to other disciplines as well in order to know whether emotional intelligence differs among different disciplines and the impact of demographic variables on emotional intelligence differs. Future researchers may conduct the study in different types of universities/educational institutions- Central, State, Deemed universities, Affiliated colleges, etc. in order to know whether results differ among different types of institutions. Apart from demographic correlates, other factors of emotional intelligence may be explored.

#### References

- Bechara, A., Tranel, D., & Damasio, A. (2000). Poor judgment inspite of high intellect: Neurological evidence for emotional intelligence. In R. Bar-On & J.D. Parker (Eds), *The handbook of emotional intelligence: Theory, development, assessment and application at home, school and in the workplace.* San Francisco, Jossey-Bass.
- Brackett, M.A., Mayer, J.D., & Warner, R.M. (2004). Emotional intelligence and its expression in everyday behavior. *Personality and Individual Differences*, *36*, 1387-1402.
- Chapman, B.P. & Hayslip, B. Jr. (2006). Emotional intelligence in young and middle adulthood: Cross sectional analysis of latent structure and means. *Psychology and Aging*, 21(2), 411-418.
- Charbonneau, D., & Nicol, A.M. (2002). Emotional intelligence and prosocial behavior in adolescents. *Psychological Reports*, 90 (2), 361-370.
- Ciarrochi, J., Chan A.Y.C., & Bajgar, J. (2001). Measuring emotional intelligence in adolescents. *Personality and Individual Differences*, 31(7), 1105-1119.
- Das, G.M. A. (2011). Emotional intelligence and personality in students pursuing professional and non-professional courses The influence of personal correlates. *Prabandhan : Indian Journal of Management, 4* (1), 43 49.
- David, L.V., Alonso, A., & Viswesvaran, C. (2005). Group differences in emotional intelligence scores: Theoretical and practical implications. *Personality and Individual Differences*, 38(3), 689-700.
- Depape, A. R., Larson, H. J., Voelker, S., & Page, S. (2006). Self-talk and emotional intelligence in university students. *Canadian Journal of Behavioural Science*, 38(3), 250-260.
- Goleman, D. (1995). Emotional Intelligence: Why it can matter more than IQ? New York: Bantam Books.
- Gowdhaman, K., & Murugan, M. B. (2009). Emotional intelligence among the B.Ed teacher trainees. *Psycholingua*, 39 (2), 187-190.
- Harrod, N.R., & Scheer, S. D. (2005). An exploration of adolescent emotional intelligence in relation to demographic characteristics. *Adolescence*, 40 (159), 503-512.
- Hunt, N., & Evans, D. (2004). Predicting traumatic stress using emotional intelligence. *Behaviour Research and Therapy*, 42 (7), 791-798.
- Jacques, E.T. (2009). *The relationship between emotional intelligence and the academic performance and selection of a major of college students*, TUI University, Proquest Dissertations and Thesis.
- Jan, M., Hyder, A., & Ruhi, N. (2013). An assessment of emotional intelligence among girls students studying in professional colleges. *IOSR Journal of Humanities and Social Science*, 17 (6), 22-26.
- Kafetsios, K. (2004). Attachment and emotional intelligence abilities across the life course. *Personality and Individual Differences*, 37(1), 129-145.
- Kant, R. & Lenka, S.K. (2013). Does emotional intelligence get affected from some biographical factors- in special reference to trainee teachers? *American Journal of Educational Research*, 1 (6), 216-220.
- Katyal, S., & Awasthi, E. (2005). Gender differences in emotional intelligence among adolescents of Chandigarh. *Journal of Human Ecology, 17*(2), 153-155.
- Mathur, M., Malhotra, B., & Dube, S. (2005). Gender differences on emotional intelligence and scholastic achievement in school going adolescents. *Indian Psychological Review, 64* (3), 133-136.

- Mayer, J.D., Caruso, D.R., & Salovey, P. (2000). Emotional intelligence meets traditional standards for intelligence. *Intelligence*, *27*(4), 267-298.
- Mishra, R., & Ranjan P. (2008). Emotional intelligence as related to self esteem of adolescents. *Indian Journal of Human Relations*, *34*, 13-17.
- Mohanty, I., & Uma Devi, L. (2010). Socio-personal variables and emotional intelligence of adolescents in secure attachment style. *Indian Psychological Review*, 74(1), 29-37.
- Namdar, H., Sahebihagh, M., Ebrahimi, H., & Rahmani, A. (2008). Assessing EI and its relationship with demographic factors of nursing students. *Iranian Journal of Nursing and Midwifery Research*, 13 (4), 4-8.
- Nasar, R., & Nasar, Z. (2008). Emotional intelligence and creativity. *Indian Psychological Review*, 71, 251-254.
- Pandey, R., & Tripathi, A.N. (2004). Development of emotional intelligence: Some preliminary observations. *Psychological Studies*, 49(2), 147-150.
- Rauf, F.H.A., Tarmidi, M., Omar, M., Yaaziz, N.N.R., & Zubir, N. I. D.M. (2013). Personal, family and academic factors towards emotional intelligence: A case study. *International Journal of Applied Psychology*, 3 (1), 1-6.
- Salovey, P., & Mayer, J.D. (1990). Emotional intelligence, imagination, cognition. *Personality*, 9(3), 185-211.
- Schutte, N.S., Malouff, J.M., Hall, L.E., Haggerty, D., Cooper, J.T., Golden, C.J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*, 25 (2), 167-177.
- Srivastava, K.B.L., & Bharamanaikar, S.R. (2004). Emotional intelligence and effective leadership behaviour. *Psychological Studies*, 49 (2), 107-113.
- Sumantha, P. (2009). Emotional intelligence and personality traits of pupil teachers. *Journal of Community Guidance and Research*, 8(1), 122-123.
- Tatawadi, S. (2009). Emotional maturity of management students. *Psycholingua*, 39(1), 78-82.
- Thingujam, N.K.S., & Ram. U. (2000). Emotional intelligence scale: Indian norms. *Journal of Education and Psychology*, 58, 40-48.
- Tyagi, S.K. (2004). *Emotional intelligence of secondary teachers in relation to gender and age*. Indian Educational Abstracts, New Delhi: NCERT.
- Uma Devi, L., & Rayal, U.T.R. (2004). Adolescent's perception about family environment and emotional intelligence. *Indian Psychological Review*, 62 (3), 157-167.
- Van Rooy, D.L. Alanso, A., & Visweshvaran, C. (2005). Group differences in emotional intelligence scores: Theoretical and practical implications. *Personality and Individual Differences*, 38(3), 689-700.
- Wong, C. S., Wong, P. M., & Law, K.S. (2005). The interacting effect of emotional intelligence and emotional labour on job satisfaction: A test of Holland's classification of occupations. In C. E. Hartel, W.J. Zerbe, & N.M. Ashkanasy, *Emotions in organizational behavior* (pp. 235 250). Mahwah, N.J.: Lawrence Erlbaum Associates Publishers.
- Yelkikalan, N., Hacioglu, G., Kiray, A., Ezilmez, B., Soylemezoglu, E., Cetin, H., Sonmez, R., & Özturk, S. (2012). Emotional intelligence characteristics of students studying at various faculties and colleges of universities. *European Scientific Journal*, 8(8), 33-50.